

S. 2597, LEGEND Act of 2019

 As ordered reported by the Senate Committee on Commerce, Science, and Transportation
 on November 13, 2019

By Fiscal Year, Millions of Dollars	2020	2020-2025	2020-2030
Direct Spending (Outlays)	0	0	0
Revenues	0	0	0
Increase or Decrease (-) in the Deficit	0	0	0
Spending Subject to Appropriation (Outlays)	0	135	not estimated
Statutory pay-as-you-go procedures apply?	No	Mandate Effects	
Increases on-budget deficits in any of the four consecutive 10-year periods beginning in 2031?	No	Contains intergovernmental mandate?	No
		Contains private-sector mandate?	No

S. 2597 would direct the National Oceanic and Atmospheric Administration (NOAA) to publish its weather-forecasting models and associated government-owned data in an open-source format. The bill would require NOAA to periodically review any improvements made to those open-source models by people outside the government and update its models accordingly. The bill also would require NOAA to report to the Congress on the implementation of S. 2597 within one year of enactment.

Under current law, NOAA provides public access to some of its operational and research models. The agency would need additional resources to provide permanent archive and open-source access to all such models, which currently use many petabytes of data (a petabyte is one million gigabytes).

CBO assumes the bill will be enacted in fiscal year 2020. The bill would require NOAA to implement the requirements over the 2021-2026 period.

Using information from NOAA about the many models and related data that would be made public under the bill and on the cost to convert those data into an open-source format, CBO estimates that implementing S. 2597 would cost \$135 million over the 2020-2025 period. NOAA's costs would total nearly \$30 million a year, on average, for 45 additional employees and additional equipment and services. Such spending would be subject to appropriation of the necessary amounts.



The costs of the legislation, detailed in Table 1, fall within budget function 300 (natural resources and environment).

Table 1.
Estimated Increases in Spending Subject to Appropriation Under S. 2597

	By Fiscal Year, Millions of Dollars						2020-2024
	2020	2021	2022	2023	2024	2025	
Estimated Authorization	0	20	35	35	30	30	150
Estimated Outlays	0	10	25	35	35	30	135

The CBO staff contact for this estimate is Robert Reese. The estimate was reviewed by H. Samuel Papenfuss, Deputy Director of Budget Analysis.